CLAIMS:

1. A method for detecting accidental contact between a person and a dangerous portion of a woodworking machine, the method comprising:

providing a first electrode electrically coupled to the person;

providing a second electrode electrically coupled to the dangerous portion;

transmitting a signal by one of the first or second electrodes; and

identifying contact if the transmitted signal is received by the other of the first or second electrodes.

2. The method of claim 1, where the step of transmitting includes transmitting the signal by the first electrode through the person.

3. The method of claim 1, where the step of transmitting includes transmitting the signal by the second electrode through the dangerous portion.

4. The method of claim 1, where the woodworking machine includes at least one cutting tool, and where the step of providing a second electrode includes providing a second electrode electrically coupled to the at least one cutting tool.

5. The method of claim 1, where the woodworking machine includes at least one guard, and where the step of providing a second electrode includes providing a second electrode electrically coupled to the at least one guard.

6. The method of claim 1, where the step of transmitting includes transmitting an alternating electrical signal.

7. The method of claim 6, where the alternating electrical signal has a particular frequency, and where the step of identifying includes identifying contact if an electrical signal having the particular frequency is received.

8. The method of claim 1, where the step of transmitting includes transmitting a ground electrical signal.

9. A woodworking machine comprising:

a support structure;

a cutting tool supported by the support structure and configured to cut workpieces;

a motor configured to drive the cutting tool; and

a safety system configured to detect accidental contact between a person and the cutting tool and take one or more predetermined actions in the event such contact is detected;

where the safety system includes a first electrode configured to electrically couple to the person's body, and a second electrode configured to electrically couple to the cutting tool; and

where the safety system is configured to apply an electrical signal to one of the first or second electrodes and to detect whether a corresponding signal is transmitted to the other one of the first or second electrodes through the person's body.

10. The woodworking machine of claim 9, where the support structure includes at least one contact region configured to contact a person during operation of the woodworking machine, and where the first electrode is configured to electrically couple to the person's body via the at least one contact region.

11. The woodworking machine of claim 9, where the support structure includes at least one handle configured to be contacted by a person during operation of the woodworking machine, and where the first electrode is configured to electrically couple to the person's body via the at least one handle.

12. The woodworking machine of claim 9, where the support structure includes at least one guard configured to contact a portion of a person's body if the portion of the user's body is placed proximate the cutting tool, and where the first electrode is configured to electrically couple to the person's body via the at least guard.

13. The woodworking machine of claim 9, further comprising a switch configured to be actuated by a person to control the motor, and where the first electrode is configured to electrically couple to the person's body via the switch.

14. A woodworking machine having one or more dangerous portions comprising:

means for coupling an electrical signal onto the person;

means for monitoring at least one of the dangerous portions for the presence of electrical signals; and

means for detecting if the electrical signal coupled onto the person becomes coupled onto the at least one dangerous portion.

15. The machine of claim 14, further comprising cutting means configured to cut workpieces, and where the at least one dangerous portion is the cutting means.

16. The machine of claim 14, further comprising cutting means for cutting workpieces, and guard means for at least partially shielding the cutting means, and where the at least one dangerous portion is the guard means.

17. The machine of claim 14, further comprising means for coupling a detection signal onto the at least one dangerous portion.

18. The machine of claim 17, where the means for detecting includes means for detecting if the detection signal coupled onto the at least one dangerous portion changes due to the coupling of the electrical signal onto the at least one dangerous portion.

19. The machine of claim 14, where the electrical signal is a ground signal.

20. The machines of claim 14, where the electrical signal is an alternating signal.